

Samsung Demonstrates the Newest Mobile WiMAX Technology

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Samsung Electronics demonstrated its newest Mobile WiMAX technology, 'Mobile WiMAX WAVE 2' at 3GSM World Congress 2007, Barcelona, Spain.

'Mobile WiMAX Wave 2' which supports Multi Input Multi Output (MIMO) and Smart Antenna is a next generation mobile telecommunications technology created by the combination of Mobile WiMAX and 4G technology. It can realize 40 Mbps download and 12 Mbps upload transmission speeds in maximum.

The demonstration in Samsung booth, Samsung Electronics used 'Mobile WiMAX Wave 2' systems and terminals to successfully demonstrate high-speed transmission of data at 34 Mbps for downloading and 8 Mbps for uploading. At this download speed allows the users to download MP3 music files (3 MB) in 0.7 second and a movie (700 MB) in 2 minutes and 45seconds.

At 3GSM, Samsung will showcase Spatial Multiplexing (SM) function of MIMO technology through 4 Field-Programmable Gate Array (FPGA) terminals. Operators can reduce CAPEX and OPEX, through the MIMO and Smart Antenna technology which increase the data through put and cell coverage compared to existing technology Single Input Single Output (SISO). Moreover, 'Mobile WiMAX Wave 2' can upgrade current platform to MIMO and Smart Antenna technology with simple software upgrade.

In addition to the demonstration, Samsung also introduced its in-house-developed core chip for ‘Mobile WiMAX Wave 2’, attracting interest from the global telecommunications industry including mobile telecommunications operators. ‘Mobile WiMAX Wave 2’ is to be deployed by Sprint and other operators by late this year.

Geesung Choi, President and CEO of Samsung’s Telecommunications Network business said, “We will continue to develop innovative technologies such as Mobile WiMAX Wave 2 and will accelerate the commercialization of Mobile WiMAX in global market.”

Samsung Electronics is now pursuing Mobile WiMAX businesses with 35 operators in 23 countries globally. The company has already concluded commercialization contracts or is implementing pilot service with nine operators in seven countries including the US, Europe, and South America.

Notes:

Mobile WiMAX Wave 1: Maximum download and upload transmission speeds: 20M/6Mbps

Mobile WiMAX Wave 2: Maximum download and upload transmission speeds: 40M/12Mbps

MIMO (Multi Input Multi Output)

Technology that increases the reliability of data signals or transmission speed by simultaneously sending and receiving data by multiple antennas. The 2x2 MIMO system used in ‘Mobile WiMAX wave 2’ allows for twice the maximum transmission speed as SISO (Single Input Single Output).

Smart antenna

Technology that identifies the location of a user by signals sent from the

terminal by the base station, and concentrates radio signals on the corresponding user (beamforming).

Source: Samsung Electronics

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